ABSTRACT

THRUST REVERSER FOR A JET ENGINE AND HYDRAULIC ACTUATOR

A thrust reverser assembly comprising at least one thrust reverser element which, during normal use in association with a jet engine, is movable between a stowed position and a deployed position and is so arranged as to experience an assisting load during movement of the element from the stowed position towards the deployed position, a source of hydraulic fluid under pressure, and, a double-acting hydraulic piston and cylinder device for moving said element between said stowed and deployed positions, said hydraulic piston and cylinder device having a first port through which hydraulic fluid under pressure from said source is admitted to one side of said device, said one side of the device being a high pressure side during operation of the device in a thrust reverser element deploy mode, to displace said element from its stowed position, a second port through which hydraulic fluid is displaced from a low pressure side of the device during operation in said deploy mode, a return line through which hydraulic fluid displaced from said low pressure side of said device is returned to said high pressure side of said device in addition to said fluid supply from said pressure source, and, a check valve in said return line preventing flow of hydraulic fluid from said high pressure side to said low pressure side of said device.